Safeguarding wetland on Laboratory property

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Protecting all facets of our environment

The Laboratory is in the process of reducing the number of its outfalls (discharges of liquids into the environment—most often treated wastewater) for a number of reasons:

- Every outfall requires a separate characterization and permit with the state
- Each requires sampling to ensure it's in compliance with the permit
- Any deviation from the permit must be documented and reported

While the Lab's eventual goal is to reduce it's number of outfalls (as defined by the National Pollutant Discharge Elimination System) to zero, it's making good progress and since 1993 has reduced its number of outfalls from 141 to nine.

Maintaining Laboratory environmental assets

However, there is a downside to this environmentally sound activity: these outfalls and stormwater runoff have traditionally fed a wetland in Sandia Canyon on Laboratory property and declining amounts of water to it could potential negatively impact its sustainability. The wetland on Lab property is important because it:

- Helps promotes biodiversity (many birds and other animals inhabit the area)
- Helps clean the environment (such as assisting convert historic chromium releases from a toxic form [6] to benign [3])
- Helps keep storm runoff and any potential contaminates on Laboratory property where they can be managed and remediated

Investing in our wetland

To help maintain the ecosystem under these conditions, the Lab is investing $2.5 million in a project to keep the water in place through the placement of three walls as a grade-control structure to slow water movement from the area as well as minimize erosion. Plans for the work have been reviewed and approved by the State of New Mexico's Hazardous Waste and Surface Water Quality bureaus and the U.S. Army Corps of Engineers.

In an effort to stabilize the area, personnel from the Laboratory's Corrective Actions Program are also working with Los Alamos County to help reduce sediment transported by stormwater from the County's former landfill on the plateau directly above Sandia Canyon.

Once the grade-control structure and other associated work is complete, the site restoration includes the addition of 20,000 plants, including cattails and various willows.

Contracts for the work have gone to regional companies including Portage, Inc., Shiver Construction and Los Alamos Landscaping.

Resources:

The State of New Mexico's Wetlands program website.The project's Phase I report.The project's Phase II report.The project's Integrated Work Document (including safety precautions).